

Notice of Allowability

Application No.

09/658,136

Examiner

Tom V. Sheng

Applicant(s)

OKAMOTO ET AL.

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 11/29/2004.
2. ☒ The allowed claim(s) is/are 1-4,7,9-11,13-16,18 and 21.
3. ☒ The drawings filed on 11 May 2004 and 08 September 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Cathy Voisinnet on 7/22/2005.

Please amend the claims as follows:

Claim 1, line 8: insert --of a-- before "plurality of motion picture".

Claim 2, line 5: replace "formulae" with --formula--.

Claim 7, lines 6-7: replace "each formulae" with --each formula--; insert --of a-- before "plurality of motion picture"; and replace "correction pattern classified" with --correction patterns classified--.

Claim 13, line 11: replace "each formulae" with --each formula--.

Claim 15, lines 8-9: replace "each logical formulae" with --each logical formula--; insert --of a-- before "plurality of motion picture"; and replace "correction pattern classified" with --correction patterns classified--.

Claim 16, line 11: replace "logical formulae" with --the logical formula--.

Claim 18, line 12: replace "logical formulae" with --logical formula-- and insert --of a-- before "plurality of motion picture".

Claim 21, line 15: replace "each formulae" with --each formula--.

Allowable Subject Matter

2. Claims 1-4, 7, 9-11, 13-16, 18 and 21 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed to a motion picture pseudo contour correction by detecting a gray level shift from a focused pixel to an adjacent pixel in a frame, detecting a motion vector from the focused pixel to another pixel, and generating a correction gray level signal based on a logical formula, of which there are a plurality of logical formulae to choose from and the logical formulae are classified according to a plurality of motion picture pseudo contour correction patterns classified in turn according to the respective gray level information and motion information.

Independent claim 1 identifies the uniquely distinct and novel feature, "generating a correction gray level signal using one of a plurality of logical formulae, wherein each logical formula is formularized for each of a plurality of motion picture pseudo contour correction patterns classified, wherein each correction pattern is classified according to the respective gray level information of the focused pixel and adjacent pixel, and the motion information." Independent claim 7 and 18 identify similarly distinct and novel feature as claim 1. Independent claim 13 identifies the uniquely distinct and novel feature, "generating the motion picture pseudo contour correction-use signal using one of a plurality of formulae, wherein each formula is formularized for each group of gray level shifts between the focused pixel and the adjacent pixel, in order to generate the motion picture pseudo contour correction-use signal using the same computation with

Art Unit: 2673

respect to gray level shifts of the same group.” Independent claim 21 identifies similarly distinct and novel feature as claim 13.

The closest art, Mikoshiba (IDW 1996, pp. 251-254), teaches a motion-dependent equalizing pulse technique, which adds positive and negative light emission to an original signal with gray-level disturbances of an image moving at a speed. However, there is no teaching of a plurality of formulae to be used according to plurality of motion picture pseudo contour correction patterns, nor according to plurality of groups of gray level shifts.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng
July 25, 2005



DENNIS-DOON CHOW
PRIMARY EXAMINER